

## PATENT ABSTRACTS OF JAPAN

(11)Publication number : 11-106552

(43)Date of publication of application : 20.04.1999

---

(51)Int.Cl.

C08J 9/28  
C08J 9/36

---

(21)Application number : 09-282500

(71)Applicant : TONEN KAGAKU KK

(22)Date of filing : 30.09.1997

(72)Inventor : KAIMAI NORIMITSU

TAKITA KOTARO

KONO KOICHI

FUNAOKA HIDEHIKO

---

### (54) MICROPOROUS HYDROPHILIZED POLYOLEFIN MEMBRANE AND ITS PRODUCTION

(57)Abstract:

PROBLEM TO BE SOLVED: To obtain a high-strength high-permeability hydrophilic microporous membrane by grafting a specified amount of an acrylic monomer onto the surface and pore surfaces of a microporous membrane made from a polyolefin composition containing an at least specified amount of an ultrahigh-molecular-weight polyolefin and having a specified porosity and a specified air permeability.

SOLUTION: 5-40 wt.% acrylic monomer is grafted onto the pore surfaces and surface of a microporous membrane made from a polyolefin composition containing at least 1 wt.% ultrahigh-molecular-weight polyolefin having a weight-average molecular weight of  $5 \times 10^5$  or above and having a porosity of 50% or above and an air permeability of 60 Gurley sec or below. The microporous polyolefin membrane is made by extruding a solvent solution of a polyolefin composition having a specified composition to form a film, removing the solvent from the film and heat-setting it. The acrylic monomer is grafted onto its surface after the surface is treated by irradiation with an ionizing radiation. The acrylic monomer is exemplified by a (meth)acrylic acid (ester) desirably in combination with a crosslinking agent, Mohr's salt and water/alcohol.